PTO/SSGIA (1946 Approved for use through 19/31/99, ONE) 0651-0031 Patient and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Pass	erwork Reduction Act of	1996, no persons a	ra required to respond to a collection of information or	rest it contains a valid ONG control number	
	Substitute for				plete If Kn wn
	STA	TEMEN	ION DISCLOSURE IT BY APPLICANT  by sheets as necessary)	Application Number	10/607,247
		1000 00 1100	y discus as incommy,	Filing Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
l '				Group Art Unit	
			•	Examiner Name	
Sheet	1 1	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

			U.S. PATENT DOCUM	IENTS .	
Examiner Initials*	No.¹	US Patent Document	Name of Patentse or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code (if known			
8		3,960,150	Hussain, et al.	08-01-1976	
T	•	3,981,303	Higuchi, et al.	09-21-1976	
		3,986,510	Higuchi, et al.	10-19-1976	
		3,993,071	Higuchi, et al.	11-23-1976	
		4,076,800	Marsh, et al.	02-28-1978	
		4,193,845	Kaetsu, et al.	03-18-1980	
$\neg \neg$		4,194,066	Kaetsu, et al.	03-18-1980	
		4,195,129	Fukul, et al.	03-25-1980	
		4,226,938	Yoshida, et al.	10-07-1980	
		4,272,617	Kaetsu, et al.	06-09-1981	
		4,283,325	Berthet, et al.	08-11-1981	
		4,295,762	Slovinsky	10-20-1981	
		4,298,002	Ronel, et al.	11-03-1981	
		4,321,117	Kaetsu, et al.	03-23-1982	
2		4,329,332	Courvreur, et al.	03-11-1982	

			···	1	OREIGN PATENT DOCUMEN	TS	·	
Examiner Initials*	Cite No.1	Foreign Patent Document		rument	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Unes, Where Relevant Passages or Relevant Figures Appear	7
		Office.3	Number*	Kind Code <sup>3</sup> (If known)	]	<u> </u>		<u> </u>
an		PCT	WO 91/10425		Brown University Research Foundation	07-25-1991		
a		PCT	WO 93/09176		Clover Consolidated, Limited	05-13-1993		
001		PCT	WO 93/17669		Board of Regents, The University of Texas System	09-16-1993	·	
		PCT	WO 93/21266		Clover Consolidated, Limited	10-28-1993		
97/		EP	0 195 304		The Dow Chemical Company	09-24-1986	-	
on		JP	1-324743		General Director National Circulatory Disease Hospital	08-12-1991		

	. 11		
Examine Signature	WIF	Date Considered	. ,
			,

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>8</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

	Substitute fo	r form 1449.	A/PTO ·	Complete If Kn wn		
		ATEME	TION DISCLOSURE NT BY APPLICANT  uny sheets as necessary)	Applicati n Number	10/607, 247	
_		(	.,,,,	Filing Date	June 25, 2003	
·				First Named Inventor	Jeffrey A. Hubbell	
				Group Art Unit		
				Examiner Name	·	
heet	2	l of	20	Attorney Docket Number	UTSB 493 CIP CON (5)	

			U.S. PATENT DOCUM	ENTS	·
Examiner Cite Initials' No.		US Patent Documen	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Cotumns, Lines, Where Relevant Passages or Relevant Figures Appear
İ		Number Kind Co (if kno			
and		4,352,883	Lim	10-05-1982	
	_	4,359,483	Kaetsu, et al.	11-16-1982	
		4,376,059	Davis, et al.	03-08-1983	
		4,391,909	Lim	07-05-1983	
		4,409,331	Lim	10-11-1983	
		4,411,754	Kaetsu, et al.	10-25-1983	
$\neg$		4,434,150	Azad, et al.	02-28-1984	
		4,450,150	Sidman	05-22-1984	
$\neg$		4,511,478	Nowinski, et al.	04-16-1985	
$\neg$	_	4,526,938	Churchill, et al.	07-02-1985	
		4,563,489	Urist	01-07-1986	
$\neg$		4,590,088	Berthet, et al.	05-20-1986	
		4,605,622	Hasegawa, et al.	08-12-1986	
		4,637,931	Schmitz	01-20-1987	•
ah~		4,647,538	Mosbach, et al.	03-03-1987	·

Cite No.1			Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	"	
	Office.*	Number	Kind Code <sup>a</sup> (if known)			_
						$\vdash$
 	-					╁╌

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Oraw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here If English tanguage Translation is attached.

	Substitute for		s are required to respond to a collection of information or APTO	C mplete if Kn wn		
	ST	ATEME	TION DISCLOSURE NT BY APPLICANT any sheets as necessary)	Applicati n Number	10/607, 247	
		,	.,,	Filing Date	June 25, 2003	
				First Named Inventor	Jeffrey A. Hubbell	
l				Group Art Unit		
				Examiner Name		
Sheet	3	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)	

			U.S. PATENT DOCUM	MENTS	
Examiner Cite Initials No.'		US Patent Documer	t Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Cotumns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Coo (if kno			
2~	-	4,652,443	Yoshida, et al.	03-24-1987	
		4,663,286	Tsang, et al.	05-05-1987	
		4,689,293	Goosen, et al.	08-25-1987	
		4,744,933	Rha, et al.	05-17-1988	
		4,745,160	Churchill, et al.	05-17-1988	
		4,749,620	Rha, et al.	06-07-1988	
		4,774,178	Egerer, et al.	09-27-1988	
		4,791,081	Sumino, et al.	12-13-1988	
$\neg$		4,804,691	English, et al.	02-14-1989	
		4,806,355	Goosen, et al.	02-21-1989	
		4,822,535	Ekman, et al.	04-18-1989	
		4,826,945	Cohn, et al.	05-02-1989	
		4,888,413	Domb	12-19-1989	
		4,889,722	Sheffield, et al.	12-26-1989	
$\overline{a}$	_	4,913,903	Sudmann, et al.	04-03-1990	

			F(	DREIGN PATENT DOCUMEN	TS		
Examiner Cite Initials* No.1	Foreign Patent Docume				Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Unes, Where Relevant Passages or Relevant Figures Appear	178
	Office. <sup>3</sup>	Number	Kind Code <sup>5</sup> (if known)				
							┺
_							<u> </u>
							<u></u>
							Щ.
							1_
				11	ate Considered		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

Signature

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>8</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible, <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

Under the Pepen	work Reduction Act of	1995, no person:	are required to respond to a collection of information w	radinum fortoco BMO bilav a cristroco di secsi	
	Substitute for	form 1449.	APTO	Cn	nptete if Kn wn
	STA	TEME	TON DISCLOSURE NT BY APPLICANT  Try sheets as necessary)	Applicati n Number	10/107,247
		•	-	Filing Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
			·	Group Art Unit	
				Examiner Name	
Sheet	4	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

			U.S. PATENT DOCUM	ENTS	
Examiner Cite Initials* No.1		US Patent Docume	nt Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Unes, Where Relevant Passages or Relevant Figures Appear
		Number Kind Co (if kn			
<b>&gt;</b> ~~		4,916,193	Tang, et al.	04-10-1990	***
		4,925,677	Feljen	05-15-1990	•
		4,931,279	Bawa, et al.	06-05-1990	
		4,938,763	Dunn, et al.	07-03-1990	
		4,942,035	Churchill, et al.	07-17-1990	
		4,950,596	Cheng, et al.	08-21-1990	
		4,957,744	della Valle, et al.	09-18-1990	
$\neg$		5,037,656	Pitt, et al.	08-06-1991	
		5,149,416	Osterhoudt, et al.	09-22-1992	
		5,153,002	McMullen	10-06-1992	
		5,160,745	DaLuca, et al.	11-03-1992	
		5,183,690	Carr, et al.	02-02-1993	
		5,185,408	Tang, et al.	02-09-1993	
		5,219,564	Zalipsky, et al.	08-15-1993	
a~~		5,268,182	Brinker, et al.	12-07-1993	

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY		Ta
		Office."	Number	Kind Code <sup>s</sup> (if known)	1		r garoo rapout	
	<del> </del>	<del>  </del>		<del>  </del>		+	<del></del>	┢
		<del>                                     </del>		<del></del>		+	<del></del>	₩

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

1	ı	
٠	۰	•

Under the Pep	erwork Reduction Act of	1995, no persons	ero required to respond to a collection of information or	dess à conteins a valid OMB control number	
	Substitute for	form 1449/	VPTO	Com	plete if Kn wn
	STA	ATEME	TON DISCLOSURE NT BY APPLICANT  my sheets as necessary)	Applicati n Number	10/607, 247
			•	Flling Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
				Group Art Unit	
				Examiner Name	
Sheet	5	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

			U.S. PATENT DOCUM	IENTS	
Examiner Initials*	Cite No.	US Patent Document	Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code (if know			
2		. 5,271,961	Mathlowitz, et al.	12-21-1993	
		5,278,201	Dunn, et al.	01-11-1994	
		5,278,202	Dunn, et al.	01-11-1994	
1		5,286,495	Batich, et al.	02-15-1994	
		5,288,500	lbsen	02-22-1994	
		5,334,640	Desai, et al.	08-02-1994	
	_	5,410,016	Hubbell, et al.	04-25-1995	
		5,432,210	Bogan, Jr.	07-11-1995	
$\neg$		5,529,914	Hubbell et al.	06-25-1996	
$\neg$		5,573,934	Hubbell et al.	11-12-1996	
	T	5,834,274	Hubbell et al.	11-10-1998	
1		5,837,747	Soon-Shlong et al.	11-17-1998	
	_	5,843,743	Hubbell et al.	12-01-1998	
	$\cdot$				
				_1	

Examiner Initials*	Cite No.1	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Pages, Columns, Unes, Where Relevant Passages or Relevant Figures Appear	14
		Office.	Number	Kind Code <sup>a</sup> (if known)				
		<del> </del>						
							· · · · · · · · · · · · · · · · · · ·	
		<del>                                     </del>						

\*EXAMINER: tritial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

-	•

Substitute for form 1449A/PTO		C mplet if Kn wn				
	STATE	MENT	N DISCLOSURE BY APPLICANT Bets as necessary)	Applicati n Number	(0/407,247	
	•	•	••	Filing Date	June 25, 2003	
				First Named Inventor	Jeffrey A. Hubbell ,	
•			•	Group Art Unit		
				Examiner Name		
heet	6	of .	20	Attorney Docket Number	UTSB 493 CIP CON (5)	

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials'	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T
av		ALTMAN, et al., "Long-term plasma glucose normalization in experimental diabetic rats with microencepsulated implants of benign human insulinomes," Diabetes 35:525-33 (1986).	•
1		AMUDESWARI, et al., "Short-term biocompatability studies of hydrogel-grafted collagen copolymers," J. Biomed. Materials Res. 20:1103-09 (1986).	
		ANDRADE, et al., "Protein Adsorption and Materials Biocompatability: A Tutorial Review and Suggested Hypothesis," Advances in Polymer Science, published by Springer-Verlag Bertin Heldeberg, pp. 1-83 (1986).	•
		BUCK, "Cell Surface Receptors for Extracellular Matrix Motecules," Ann. Rev. Cell Bio. 3:179-205 (1987).	
		CHESNEAU, et al., "Polymerization indulto sous Irradiation Lager Visible," J. Bio. Ang. Chemie. 135:41-64 (1985).	
•		CHIANG, et al., "Preparation and properties of UV-autocurable BTDA-based polyester multiacrytates. I. effects of acrylic functionality and polyl molecular weight," J. App. Pol. Sci. 41:2971-85 (1990).	
		CHUN, et al., "Studies on microbial transformations XIX. use of Immobilized cells of Streptomycas Roseochromogenes for the 16 a-hydroxyolation of dehydrosplandrosterone," J. Gen. App. Microbiol. 27:505-09 (1981).	
		COHN, et al., "Biodegradable PEO/PLA block copolymer," J. Biomed. Materials Research 22:993-1009 (1988).	
		COLEMAN, et al., "Blood-materials interactions: The minimum interfacial free energy and the optimum polar/apolar ratio hypothesis," J. Biomed. Material Res. 16:381-398 (1982).	
		CROOKS, et al., "Microencapsulation of mammalian cells in a HEMA-MMA copolymer: effects on capsule morphology and permeability," J. of Biomedical Materials Res. 24:1241-62 (1990).	

Signature	W /	[[15]60]	<u> </u>
*EXAMINER: Initial if reference considered, whether	or not citation is in conformanc	e with MPEP 609. Draw line through	citation if not in conformance and not considered
Include copy of this form with next communication to	applicant.		

Date Considered

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Examiners

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents, <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

		_
-	,	

Under the Pept				ormetion unless it contains a velid CIMB control number	
	Substitute for	form 1449.	APTO	Co	emplete if Kn. wn
	STATE	MENT	N DISCLOSURE BY APPLICANT heets as necessary)	Applicati n Number	10/607, 247
	•	•	••	Fliing Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
l				Group Art Unit	
l				Examiner Name	
Sheet	7	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
xaminer's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Τæ
m		DARCUY, et al., "Immunolsolation of pancreatic a cells by microencapsulation – an in vitro study," Diabetologia 28:776-80 (1985).	
7		DENNISON, Ph.D. Thesis, Massachusetts Institute of Technology (1986).	
		DESAI, et al., "Solution technique to incorporate polyethylane oxide and other water-soluble polymers into surfaces of polymeric biomaterials,"  Biomaterials 12:144-53 (1991).	
		DESAI, et al., "Surface modifications of polymeric biomaterials for reduced thrombogenicity," Polymeric Materials Science and Engineering Proceedings of the ACS Division of Polymeric Materials Science and Engineering 62:731-35 (1990).	
		DESAI, et al., "Surface physical interpenetrating networks of poly(ethylene terephthalate) and poly(ethylene oxide) with biomedical applications,"  Macromolecules 25:226-32 (1992).	
	•	DESAI, et al., "The short-term blood biocompatability of poly(hydroxyethyl methacrylate-co-methyl methacrylate) in an in vitro flow system measured by the digital visconticroscopy," J. Biomaterial Sci. Polymer Ed. 1(2):123-46 (1989).	
		DIAMOND, et al., "Synergistic effects of interceed (Tc7) and heparin in reducing adhesion formation in the rabbit uterine horn model," Fertility and Stertify 55(2):389-94 (1991).	
	•	DOMB, et al., "Poly(anhydrides). 3. poly(anhydrides) based on aliphatic aromatic diacids," J. Macromolecules 22:3200-04 (1989).	
	<del></del> -	DOODY, et al., "Recombinant tissue plasminogen activity reduces adhesion formation in a rabbit uterine hom model," Fertility and Sterility 51(3):509-12 (1989).	
×		DUNN, et al., "Synergistic effect of intraperitoneally administered calcium channel blockade and recombinant tissueplasminogen activator to prevent adhesion formation in an animal model," Am. J. Obstetn. and Gynecol. 164(5):1327-30 (1991).	

		- 1901	
	- 1. A		
Examiner's	41 91/4	Date Considered	
Signature \( \)	$\omega$ . $\omega$	1//23/89	

<sup>\*</sup>EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

	•	ı	
_	2	L	

Under the Paper	work Redu	ction Act of 1995, ao	persons arr	required to respond to a collection of in	ormelion urdess è contaîns a valid CNIB control num	ber		
		ute for form				C mplet if Known		
	INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Applicati n Numb r	Continuation 109/694,836	7	
ĺ		luco oo ma	my oho	ets as necessary)				
		(use as the	uty on to	ion on monogony)	Filing Date	June 25, 2003	rna 25, 2003	
					First Named Inventor	Jeffrey A. Hubbell		
					Group Art Unit			
		•			Examiner Name			
Sheet		В С	f T	20	Attorney Docket Number	UTSB 493 CIP CON (5)		
					NON PATENT LITERATURE DO			
Examiners Initials*	Cite No.		i	tem (book, magazine, journal	(in CAPITAL LETTERS), title of the a l, serial, symposium, catalog, etc.), d publisher, city and/or country where i	uticle (when appropriate), title of the ate, page(s), volume-issue number(s), published	"	
an	DUPUY, et al., "In Situ Polymerization of a Microencapsulating Medium Round Living Cells," J. of Biomedical Materials Res. 22:1061-70 (1988).						·	
		DUPUY, et al. (1991).	, "Micro	encapsulation of isolated pituit	ary cells by polyacrytamide microtatex	coagulation on agarose beads," Biomaterials 12:493-495		
		EATON, Dye	sensitiz	ed photopolymerization," Adva	nces in Photochemistry, 13:427-81 (Jo	ohn Wiley & Sons, Inc. 1986).		
		EPAILLARD,	et al., P	lasma Induced Polymerization	," J. Applied Polymer Sci. 38:887-98 (1	989).	T	
				olymerisation induit par un pla 3:1035-42 (1988).	sma froid. Etude des mecanismes de	polymerisation en gonction do l'epaisseur du film,"	<del>                                     </del>	
		FOUASSIER, 192:245-260		Polymerization Induit sous Irrae	fiation laser visable 4, Le systeme eos	ina/photoamorceur ultra-violat/amine," Makromol. Chem.		
		FUERTGES,	et al., "T	he clinical efficacy of poly(eth)	fiene glycol) modified proteins," J. Con	trolled Release 11:139-48 (1990).		
		FUKUI, et al.,	"Applica	ation of photo-crosslinkable res	in to immobolization of an enzyme," F	EBS Letters 66(2):179-82 (1976).		
<del>                                      </del>	1	FUKUI, et al.,	*Applica	ations of biocatalystic immobol	ized by prepolymer methods," Adv. of	Blochemical Eng. and Blotech. 1201:1-33 (1984).		
ar	_	FUKUI, et al., 135:230-53 (1		ment of biocatalysts with photo	o-cross-linkable resin prepolymers and	urethane resin prepolymers," Methods in Enzymology		
Examiner's			1_1		Dater (	Considered		

+

Signature

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Oraw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>3</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

	1			
-	۱	۲	٠	

	Substit	ute for form 1449/	A/PTO .	· Cr	mplet if Kn wn	
		ATEMENT	N DISCLOSURE BY APPLICANT	Application Number	(0/607, 247	
,		(use as many si	heets as necessary)	Filing Date	June 25, 2003	
				First Named Inventor	Jeffrey A. Hubbell	
				Group Art Unit	Schoy As tisseen	
				Examiner Name		
Sheet		9 of	20	Attorney Docket Number	UTSB 493 CIP CON (5)	
311861		<u>, T</u>	<u> </u>	pulsatio, occident		
			OTHER ART - 1	NON PATENT LITERATURE DOCUME	NTS	
Examiner's Initials*						
gu	FUKUI, et al., "Several novel methods for immobilization of enzymes microbial cells and organelles," Biochimie 62:381-86 (1980).					
		FUKUZAI, et al., "A copolycondensation	new biodegradable copolymer of in the absence of catalysts," J. (	f glycolic acid and lactones with relatively low n of Biomedical Materials Research 25:315-28 (1	nclecutar weight prepared by direct 1991).	
		GABBAY, et al., "Ne	ew outlook on pericardial substitu	rtion after open heart operations,* Ann. Thorac.	. Surg. 48:803-12 (1989).	
		GHARAPATIAN, et	al., "Encapsulation of viable cells	s within polyacrylate membranes," Biotechnolog	gy and Bioengineering 28:1595-1600 (1986).	
		GHARAPATIAN, et Bloenginearing 30:7		for cell encapsulation: Effects of copolymer st	tructure on membrans properties," Biotechnology and	
		GIBBLE, et al., "Fib	rin glue: the perfect operative se	alant?," Transfusion 30(8):741-47 (1990).		
		GIN, et al., "Agaros	e encapsulation of islets of lange	rhans: Reduced toxicity in vitro," J. Microance	ipsulation 4239-42 (1987).	

1				
	Examiner's Signature	M WH	Date Considered	

GOLANDER, et al., "Preparation and protein adsorption properties of photopolymerized hydrophilic films containing N-viny(pyrrolidone (NVP), acryfic acid (AA) or ethyleneoxide (EO) units as studied by ESCA," Colloids and Surfaces 21:149-65 (1988).

GOLDBERG, et al., "An evaluation of the gore-tax surgical membrane for the prevention of postoperative particleal adhesion," Obstetrics and

GOMBOTZ, et al., "Immobolization of poly(ethytene oxide) on poly(ethytene terephthalate) using a plasma polymerization process," J. of Applied

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the Individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Gynecology 70(6):846-48 (1987).

Polymer Science 37:91-107 (1989).

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>3</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

Substitute for form 1449A/PTO	Complet If Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Applicati n Numb r	10/607, 247	
(,,	Filing Date	June 25, 2003	
	First Named Inventor	Jeffrey A. Hubbell	
	Group Art Unit		
	Examiner Name		
T 40 1 4 1 00	Attaches Declark Muselines	LITTOR AND CON (5)	

		OTHER ART - NON PATENT LITERATURE DOCUMENTS					
Examiner's Initials*	Cite No.'	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T				
Z		GCOSEN, et al., "Optimization of microencapsulation parameters: Semipermeable microcapsules as a bioartificial pancreas," <i>Biotechnology and Bioengineering</i> 27:146-50 (1985).					
		GRAHAM, et al., "Hydrogels for controlled drug delivery," <i>Biomaterials</i> 5:27-38 (1994).					
		HARRIS, "Laboratory synthesis of polyethylene glycol derivatives," Micromol. Chem. Phys. C25(3):325-73 (1985).					
		HATTORI, et al., "Fibroblast Cell Proliferation on Charged Hydroxyethyl Methacrylate Copolymers," J. of Colloid and Interface Science 104:72-78 (1985).	_				
		HELLER, et al., "Controlled release of water-soluble macromolecules from bioerodible hydrogels," Biomat. 40:262-68 (1983).					
		HELLER, et al., "Poly(ortho esters)," <u>Biodegradable Polymers as Drug Delivery System</u> (Chasin, et al., eds.), pp. 121-161 (1990).	_				
		HOLLAND, et al., "Polymers for biodegradable medical devices. 1. The potential of polyesters as controlled macromolecular release systems," J.  Controlled Release 4:155-80 (1986).					
$\top$		HOLTZ, "Prevention and management of peritoneal adhesions," Fertility and Starility 42(4):497-07 (1984).					
		HORBETT, "Mass action effects on competitive adsorption of fibrinogen from hemoglobin solutions and from plasma," Rhromb. Haomostas. (Stuttgart), 51(2):174-81 (1984).					
Jun	_	HU, et al., "Effect of soft segment in degradation kinetics in polyethylene glycol/poly(L-factide) block copolymers," Polymer Bulletin 30:669-76 (1993).	_				

	1.4		
Examiner's Signature W	· July	Date Considered	·
			•

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Oraw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

_	J	L	

Substitute for form 1448A/PTO		C mpl te if Kn wn					
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)					Applicati n Number	10/607, 247	
1		,	J	,	Filing Date	June 25, 2003	
					First Named Inventor	Jeffrey A. Hubbell	
1					Group Art Unit		
					Examiner Name		
Sheet	1	1 1	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)	
				OTHER ART -	NON PATENT LITERATURE DO	CUMENTS	
Examiner's Initials*	Cite No.1			item (book, magazine, journa	(in CAPITAL LETTERS), title of the ar I, aerial, symposium, catalog, etc.), dai publisher, city and/or country where pa	ta, page(s), volume-lasue number(s), ublished	73
Fin	-	HUFFMAN, et al.,* Effect of carboxyl end groups on hydrolysis of polyglycolic acid,* J. Polymer Science, Polymer Chemistry Edition 23:1839-1951 (1985).					
		HUNT, 6	tal., "Synth	esis and evaluation of a prototy;	val artificial red cell," Science 8:1165-68	(1985).	
	HUNTER, et al., "Surface modification of polyurethane to promote long-term patency of peritoneal access devises," Trans. Am. Soc. Artif. Intern.  Organs 29:250-54 (1983).						
		Intercee prospect	d (TC7) Adi ive, randon	nesion Barrier Study Group, "Pre nized multicenter clinical study,"	vention of postsurgical adhesions by Int Fertility and Sterility 51(8):933-938 (198	erceed (TC7), an absorbable adhesion barrier. a 9).	
			al., "Devek 2-136 (1989		edical-use resins; Molecular design cons	siderations and basic properties," Jap. J. Artil. Organs	
				uation of microencapsulated isle " Diabetes 38:224-25 (1989).	ts in agarose gel as bioartificial pancrea	s by studies of hormone secretion in culture and by	
	IWATA, et al., "The use of photocross/inkable polyvinyl alcohol in the immunoisolation of pancreatic islets," Transplantations Proceedings 22(2): 797-99 (1990).						
	KANAKO, et al., CA 84:123221g, "Radiation-Induced graft copolymerization to polyester, XVII. Grafting of polyethylene glycol dimethacrylates and diacrylates onto poly(ethylene tarephthalate)labric with electron beams," Nippon Genshiryoky Kenkyusho Nempo 5030:48-59 (1975).						1.
		XAREL,	et aL, "The	immobilization of whole cells: e	ngineering principals," Chemical Engine	ering Science 40(8):1321-54 (1985).	
gu	-	KARU,	Yearly revie	w - Effects of visable radiation of	on cultured cells," Photochemistry and F	thotobiology 52(8): 1089-98 (1990).	
<u> </u>		$\overline{}$	7		7		
Examiner's Signature	$\Box$	76	<u> </u>	M. VMH	Date C	preidered SAR P	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Unaw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

Under the Paper	work Reduction Act of	1995, no persons are n	equired to respond to a collection of in	terregion unless il contaîns a valid CMB control number	
	Substitute for	form 1449A/P	TO	Co	omplet If Known
	STATE	MENT B	DISCLOSURE Y APPLICANT Its as necessary)	Applicati n Number	(0/607, 247
	•	· ·		Filing Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
				Group Art Unit	
				Examiner Name	
Sheet	12	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-Issue number(s), publisher, city and/or country where published	T'
Ju		KENLEY, et al., "Poly(lactide-co-glycolide) decomposition kinetics in vivo and in vitro," Macromolecules 20/2/398-2403 (1987).	
		XIMURA, et al., "Some properties of an immobolized glycosys system of yeast in fermantative phosphorylation of nucleotides," European J. Annl. Microbiol. Biotechnol. 11:78-60 (1981).	
		KING, et al., "Alginate-polylysine microcapsules of controlled membrane molecular weight cutoff for mammalian cell culture engineering," Biotechnology Progress 3(4):231-40 (1987).	
		KOBAYASHI, et al., "Water-curable and biodegradable prepolymers," J. Biomed. Mat. Res. 25:1481-94 (1991).	
		KOSHIBA, et al., "Properties of ultra-violet curable polyurethane acrylates," J. Materials Sci. 17:1447-58 (1982).	
-		KRICHELDORF, et al., "ABA Triblock copolymers of L-Lactide and Poly(ethylene glycol)," Makromol. Chem. 194:715-25 (1993).	
		KULKARNI, et al., "Biodegradable Poly(actic acid) Polymers" <i>J. Biomed. Mater. Res.</i> 5:169-81 (1971).	
		KULKARNI, et al., "Polylactic acid for surgical implants," Arch. Surg. 93-841-45 (1966).	
		XUMAKURA, et al., "Immobilization of microbial cells in membrane form by radiation-induced cast-polymerization," Die Angewandte Makromol. Chemis. 115:75-86 (1986).	
$\frac{1}{2}$	_	LACY, et al., "Maintanance of normoglycemia in diabetic mice by subcutaneous xenografts of encapsulated islets," Science 254:1782-94 (1991).	
		LL	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiners Signature

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁴ Applicant to place a check mark here if English language Translation is attached.

	1	١	
4	4	ŀ	•

	Substitute for	form 1449A/I	P10	Co	mplete if Known
	STATE	EMENT B	DISCLOSURE BY APPLICANT orts as necessary)	Applicati n Number	6 ntinuation of 03/634,836
	(			Filing Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
				Group Art Unit	
				Examiner Name	
heet	13	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cita No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
m	`	LAMBERTI, et al., "Microencapsulation of mammalian cells in polyacrylates," Applied Biochemistry and Biotechnology 10:101-05 (1984).	
		LEACH, et al., "Reduction of postoperative adhesions in the rat uterins horn model with polyxamer 407," Am. J. Chstet. Gynecol. 162(5):1317-19 (1990).	·
		LEE, et al., "Protein-resistant surfaces prepared by PEO-containing block copolymer surfactants," J. Biomedical Materials Research 23:351-68 (1989).	
		LIM, et al., "Microencapsulated islets as bloartificial endocrine pancreas," Science 210:908-10 (1980).	
		LIN, et al., "Optically clear simultaneous interpenetrating polymer networks based on Poly(ethylene glycol) diacrylate and epoxy. I. Preparation and characterization," J. Polymer Sci. 30: 1941-51 (1992).	-
		LIPATOYA, "Medical polymer adhesives," Advances in Polym. Sci 79:85-92 (1986).	
		MAECHLING-STSRASSER, et al., "Peadsorption of polymens on glass and silica to reduce librinogen adsorption," J. of Biomedical Materials Research 23:1385-93 (1989).	
		MALLABONE, et al., "Microencapsulation of human diploid fibroblasts in cationic polyacrytates," Dept. of Chem. Eng. and Applied Chem. and Centre for Biomaterials (1989).	
	•	MATSUDA, et al., "Photoinduced prevention of tissue adhesion," ASAIO Trans. 38:M154-M155 (1992).	
ar		MAYER, et al., "Effect of viscous macromolecules on peritoneal plasminogen activator activity. A potential mechanism for their ability to reduce postoperative adhesion formation," Am. J. Obstet. L Gynecol. 159(4):957-63 (1988).	

		<u> </u>				
Examiner's Signature	M.	WH	Oa Z	16/Considered		
		,	<i>-</i>			
*EYAMINER: Initial if reference con-	idered whether or	not citation is in confort	nance with MPEP 600	Draw line through citation i	i not in conformance and not or	vasidere

Ŧ

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the relign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

	1
-	_

Under the Peper	nvork Reduction Act o	f 1995, no persons are	required to respond to a cortaction of in	terretion unless & contains a valid CN/B control number	
	Substitute for	r form 1449A/	РТО	Co	emplete if Kn wn
	STATE	EMENT B	DISCLOSURE BY APPLICANT ets as necessary)	Applicati n Number	· (0/607, 247
	<b>,</b>			Filing Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
				Group Art Unit	
				Examiner Name	
Sheet	14	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials'	als' No. titem (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number( publisher, city and/or country where published		1
out-		McMAHON, et al., "Feasibility of cellular microencapsulation technology for evaluation of anti-human immunodeficiency virus drug in vivo," J. Nat. Cancer Inst. 82(22):1761-65 (1990).	
		MENZIES, et al., "The role of plasminogen ectivator in adhesion prevention," Surgery Gynecology and Obstetr. 172:382-68 (1991).	
		MERRILL, et al., "Platelet-compatible hydrophilic segmented polyurethanes from polyethylene glycols and cyclohexane disoccyanate," Trans. Am. Soc. Artif. Intern. Organs 28:482-87 (1982).	_
		MILLER, et al., "Degradation rates of oral resorbable implants (Polylactates and Polyglycolates): Rate modification with changes in PLA/PGA copolymer ratios," <i>J. Biomed. Mater. Res.</i> 11:711-19 (1977).	
		MIYAKE, et al., "Solution properties of synthetic polypeptides. XVIII: Hefix-colf transition of poly-m2-(2-Hydroxyethyf)L-Glutamine," <i>Biopolymers</i> 13:1173-86 (1974).	
		MIYAMA, et al., "Graft copolymenization of methoxypoly (ethylene Glycohol) methocrylate onto polyacrylonitrite and evaluation of nonthrombogenicity of the copolymer," Journal of Applied Polymer Science 35:115-25 (1988).	
		MORI, et al., "A new antithrombogenic material with long polyethylenoxide chains, " Trans. Am. Soc. Artil. Intem. Organs 28:459-463 (1982).	
		NAGAOKA, et al., "Clinical application of antithrombogenic hydrogel with long poly(ethylene oxide) chains," Biomaterials 11:119-121 (1990).	
		NAGAOKA, et al., "Interaction between blood components and hydrogels with Poly(ethylene) Chains," Hoffman, et al., Polymers as Biomaterials, Shalaby, ed., pp. 360-75 (Plenum Press) (984),	
at	-	NECKERS, et al., "Photopolymerization using derivatives of fluorescein," American Chemical Society, Proceedings of the ACS Division of Polymeric Materials: Science and Engineering, 60:15-16 (1989).	

<sup>\*</sup>EXAMINER: Initial if reterence considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner's Signature

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documenta. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WiPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

-	_

	Substitute for	form 1449A/P1	O	C	mplete if Kn wn
	STATE	MENT BY	DISCLOSURE / APPLICANT	Application Number	10/607,247
		-	-	Filing Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
		•		Group Art Unit	
				Examiner Name	
heet	15	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

		OTHER ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), votume-issue number(s), publisher, city and/or country where published	Τ,
Jun-		NOJIRI, et al., "In Vivo protein adsorption onto polymers: A transmission electron microscopic study," Trans. Am. Soc. Artif. Intern. Organs 35:357-61 (1989).	
		O'SHEA, et al., "Encapsulation of rat Islets of langerhans prolongs xenografi survivat in diabetic mice," Diabetes 35:943-46 (1986).	
+		OKADA, et al., "Application of entrapped growing yeast cells to peptide secretion system," Appl. Microbiol. Biotechnol. 26:112-16 (1987).	
		OMATA, et al., "Immobilization of microbiol cells and enzymes with hydrophobic photo-crosslinkable resin prepalymers," European J. Appl. Microbiol. 5207-15 (1979).	
1.		OMATA, et al., "Stereoselective hydrolysis of d,I-mathyl succinate by gel-entrapped modotorula minute uzr texensis cells in organic solvent," Eur. J. Microbiol. Biotechnol. 11:199-04 (1981).	
		OMATA, et al., "Transformation of steroids by gel-entrapped nocardia rhodocrous cells in organic solvent," Eur. J. Appl. Microbiol. Biotechnol. 8:143-55 (1979).	
		PAGIDAS, et al., "Effect of ringer's lactate. Interceed (TC7) and gore-tex surgical mambrane on postsurgical adhesion formation," Fertility and Sterility 57(1): 199-01 (1992).	
		PARK, et al., "Immobolization of arthrobactor-simplex cells in thermally reversible hydrogets comparative effects of organic solvent and polymeric surfactant on steroid conversion," <i>Biotechnology Letters</i> 11(1):17-22 (1989).	
		PETERSON, "Polyathylene glycol diacrylates as embedding media for electron microscopy," Thirtieth Annual Meeting, Electron Microscopy Society of America and First Pacific Regional Conference on Electron Microscopy, 144-45 (1972).	
		PHILIPS, et al., "Radiation curable water ditutable polyester acrylates," European Polymers Paint Colour J. 183(4322): 38-40 (1993).	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

T

Examiner's Signature

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as Indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English tanguage Translation is attached.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE

Under the Properment Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a walld CMUB control number

Continuation 105/854,636-

Complete If Kn wn

	1		
-	ı	Ŀ	

	51		() BT APPLICANT by sheets as necessary)		10/667,247	
1		(npa ap uga)	y arragia da travassary)	Filing Date	June 25, 2003	
				First Named Inventor	Jeffrey A. Hubbell	
1				Group Art Unit		
				Examiner Name		
Sheet	_	6 cf	20	Attorney Docket Number	UTSB 493 CIP CON (5)	
000.						
			OTHER ART	- NON PATENT LITERATURE DOCL	JMENTS .	
Examiner's tnitials*	Cite No.			or (in CAPITAL LETTERS), title of the artic nal, serial, symposium, catalog, etc.), date, publisher, city and/or country where pub	page(s), volume-issue number(s),	Tr.
ou		PITT, et al., "All	phatic polyesters. I. The degradati	on of Poly(-caprolactone) in vivo," J. Applied	Polymer Science 26:3779-87 (1981).	
		PITT, et al., "Aliq (1981).	phatic polyesters. II. The degradat	ion of poly(DL-lactide), poly (caprolactone), a	and their copolymers in vivo," Biomaterials 2:215-20.	
	PRIOLA, et al., "Investigation on the structure-proj 14 (1993).  PRIOLA, et al., "Properties of polymeric films obta			perty relationships for films obtained from UV	curable coatings," Progress in Organic Coatings 22:30	1
				ined from u.v. cured poly(ethylene glycol) dia	acrylates," Polymer. 34(17):3653-3657 (1993).	
		PUNNONEN, et	t al., "Polyethylene glycol 4000 in i	the prevention of pertioneal adhesions," Ferti	lity and Sterility 38(4):491-92 (1982).	
		RATZSCH, et a	I., "Strahlkenchische Antielektrost	atik-Ausrustung," <i>Acta. Polymarica</i> 41(8):453	-460 (1990).	
1	<del>                                     </del>	REACH, et al., *	The U-shaped bloartificial pancre	as with rapid glucose-insulin kinetics," <i>Diabe</i>	tas 33:752-61 (1984).	
			"Anionically polymerized star macreer Reprints 31(1):215 (1990).	romotecules having divinyl benzene cores wil	th grafted Poly(Ethylene oxida) arms as biomaterials,*	
		REUVENY, et a of the Tye of the	il., "Factors affecting cell attachme e amino-charged groups," <i>Biotech</i>	nt, spreading, and growth on derivatized mic not. Bioeng. 25:469-80 (1983).	rocarriers. I. Establishment of working system and effect	t
bin	+	RONEL, et al., " Res. 17(5):855-		es for a hybrid artificial pancreas. 1. synthesi	s and chamber fabrication," J. of Biomedical Materials	
	•		· · · · / 2	4	oldend	
Examiner's Signature	-	M	, on M	Date Con	A (A)	

**Application Number** 

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

4	_

Under the Pay	erwork Reduction Act of	1995, no persons er	e required to respond to a collection of in	puntino nelesa il containo a valid OMB conjuni number		
	Substitute for	torm 1449A/	РТО	C mplete if Kn wn		
·	STATE	MENT E	I DISCLOSURE BY APPLICANT lets as necessary)	Applicati n Numb r	10/667, 247	
	•	•		Filing Date	June 25, 2003	
				First Named Inventor	Jeffrey A. Hubbell	
				Group Art Unit	·	
				Examiner Name		
Sheet	17	of	20	Attorney Docket Number	UTSB 493 CIP CON (5)	

			OTHER ART - NON PATENT LITERATURE DOCUMENTS					
Examiner's Initials*		Cite No.	o.' item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published					
5	an		SAWHNEY, et al., "Poly(ethylene oxide)-graft-poly(L-lysine) copolymers to enhance the blocompatability of poly(L-lysine)-alginate microcapsule membranea," Biomaterials 13(12):863-870 (1992).					
			SAWHNEY, et al., "Rapidly degraded terpolymens of di-lactide, glycolide, and acaprotactone with increased hydrophilicity by copolymerization with polyethers," J. Biomedical Materials Research 24:1397-1411 (1990).					
		_	SEFTON, et al., "Hydrophilic polyacrylates for the microencapsulation of fibroblasts or pancreatic islets," J. of Controlled Release 6:177-187 (1987).					
<u> </u>			SHIMIZU, et al., "Studies on composites of collegen and a synthetic polymer," Biomat. Med. Dev. Art. Org. 8(4):375-391 (1978).					
			SKARDA, et al., "Biodegradable hydrogel for controlled release of biologically active macromolecules," J. Bioactive and Compatible Polymers 8:24-37 (1993).					
			SONOMOTO, et al., "Growth of Curvularia lunate spores into mycella form within various gels, and steroid 11-hydroxylation by the entrapped mycella,"  J. Ferment. Technol. 59(6):465-469 (1981).					
П			SPECKHARD, et al., "Properties of UV-curable polyuthane acrylates: Effect of reactive diluent," J. Appl. Poly. Sci. 30(2):847-66 (1985).					
$\prod$			SPILIZEWSKI, et al., "The effect of hydrocortisone acetate loaded Poly(DL-lactide) films on the inflammatory response," J. Controlled Release 2:197-203 (1985).					
			STEINLEITNER, et al., "Poloxamer 407 as an intraperitoneal barrier material for the prevention of ostsurgical adhesion formation and reformation in rodent models for reproductive surgery," Obstetrics and Gynecology 77(1):48-52 (1991).					
a	~		STEVENSON, et al., "Graft copolymer emulsions of sodium alginate with hydroxyalkyl methacrylates for microencapsulation," Biomaterials 8:449-57 (1987).					

Examiner's Signature	> 9M	AH	Date Considered	
		<i> </i> //		
			to a second control of the second control of the second	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WiPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the Indication of the year of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

nder the Paperwork Reduct	on Act of 1995, no pers	ons are required to	respond to a collection of	đ
Substitu	te for form 144	9A/PTO		_

Substitute for form 1449A/PTO  INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (use as many sheets as necessary)  Filing Date First Named Inventor Group Art Unit Examiner Name  Attorney Docket Number  UTSB 493 CIP CON (5)	Under the Pape	mert Reduction Act of	1995, no persons are i	aquired to respond to a collection of in	benedion unitess il contains a valid OMB control number		
STATEMENT BY APPLICANT  (use as many sheets as necessary)  Filing Oate First Named Inventor Group Art Unit Examiner Name		Substitute for	form 1449A/P	ТО	Complete if Kn wn		
First Named Inventor Jeffrey A. Hubbell Group Art Unit Examiner Name		STATE	MENT B	Y APPLICANT	Applicati n Numb r		
Group Art Unit Examiner Name		,	•	••	Filing Date	June 25, 2003	
Examiner Name					First Named Inventor	Jeffrey A. Hubbell	
	f				Group Art Unit		
Sheet 18 of 20 Attorney Docket Number UTSB 493 CIP CON (5)					Examiner Name		
Short 10 di 20 partito postali i tempo	Sheet	18	af	20	Attorney Docket Number	UTSB 493 CIP CON (5)	

		OTHER ART NON PATENT LITERATURE DOCUMENTS	
xaminer's Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	ו
July 1		STEVENSON, et al., "Microencapsulation of mammatian calls in a hydroxyethyl methacrylate-methyl methacrylate copolymer: Preliminary development," Biomat. Art. Cells 16:747-69 (1988).	
		SUN, et al., "Encapsulated versus modified endocrine cells for organ replacement," Trans. Am. Soc. Artil. Intern. Organs 33:787-90 (1987).	
		SUN, et al., "Non-fouting biomaterial surfaces: II. Protein adsorption on radiation grafted polyethylene glycol for methacrylate copolymers," Center for Bioengineering 28(1):292-94 (1987).	
		SUN, et al., "The use, in diabetic rats and monkeys, of artificial capillary units containing Cultured islets of langerhans Artificial Endocrine Pancreas,"  Diabetes 28(12):1138-39 (1977).	
		SUZUKI, et al., "Microencapsulation and dissolution properties of a neuroleptic in a biodegradable polymer, Poly(d,1-lactide)," J. Pharmaceutical Sciences 74(1):20-24 (1985).	
		TANAKA, et al., "Immobilization of yeast microbodies by inclusion with photo-crosslinkable resins," Eur. J. Biochem. 80:193-97 (1977).	·
		THOMAS, ed., "Lumen," in Taber's Cyclopedic Medical Dictionary, 12° Edition (F.A. Davis Company, Philadelphia) 🕻 (973),	
		THOMPSON, et al., "Fibrin glue: A review of its preparation efficacy, and adverse effects as a topical hemostat," <i>Drug Intelligence and Clinical Pharmacy</i> 22:948-52 (1988).	
		URETZKY, et al., "Long-term evaluation of a new selectively biodegradable vascular graft coated with polyethylane oxide-polylactic acid for right ventricular conduit," J. Thorac Cardiovasc. Surg. 133:769-80 (1990).	
, T.	_	URMAN, et al., "Effect of hyaturonic acid on postoperative intraperitoneal adhesion formation and reformation in the rat model," Fertility and Sterility 56(3):568-70 (1990).	r

	<u> </u>				
Examiner's		N/	VIII	Date Considered	
Signature	$\mathbb{R}^{1}$	IM .	WAT.	1/22/06/	
		<del></del>	<del></del>		

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documenta. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is stached.

Under the Peo	ensork Reduction Act o	1 1996, no persons e	re required to respond to a collection of la	branestion undesse it contactive a verifici CAAS control number		
	Substitute for	r form 1449A	/PTO	C mplete If Kn wn		
	STATI	EMENT	N DISCLOSURE BY APPLICANT eets as necessary)	Applicati n Number	10/607,247	
ł	•	•	•	Filing Date	June 25, 2003	
l				First Named Inventor	Jeffrey A. Hubbell	
				Group Art Unit		
· ·			•	Examiner Name		
Sheet	19	ď	20	Attorney Docket Number	UTSB 493 CIP CON (5)	

			OTHER ART NON PATENT LITERATURE DOCUMENTS			
	Examiner's Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T*		
	Du		URMAN, et al., "Effect of hyaluronic acid on postoperative intraperitoneal adhesion formation and reformation in the rat model," Fertility and Sterility 56(3):563-67 (1991).			
			VAN NEERBOS, "Parameters in UV curable materials which influence cure speed," J. Oli Col. Chem. Assoc. 61(1):241-50 (1978).			
			VAN WACHEM, et al., "Adhesion of cultured human endothelial cells onto methacrylate polymers with varying surface wattability and charge,"  Biomaterials 8:323-28 (1987).			
			VISSCHER, et al., "Biodegradation of and tissue reaction to 50:50 poly(DL-lactide-co-glycolide) microcapsules," J. Biomedical Materials Research 19:349-65 (1985).			
			WEN, ET al., "Microcapsulas through polymar compeliation," Dept. of Chemistry and Inst. For Aviation Research (1980).			
ļ——	T		WONG, et al., "The viability and regeneration of artificial cell microencepsulated rat hepatocyte xenografi transplants in mice," Biomat. 16(4):731-39 (1988).			
	T		WOODWARD, et al., "The intracellular degradation of poly(o-caprolactone)," J. Biomedical. Materials Research 19:437-44 (1985).			
			WUJEK, et al., "A carbohydrate polymer that effectively prevents epidural fibrosis at laminectomy sites in the rat," Exp. Neurology 114237-45 (1991).			
			ZHU, et al., "Preparation and properties of D.L-lactide and ethylene oxide copolymer: A modifying biodegradable polymeric material," J. Polymer Sci. Part C: Polymer Letters 24:331-37 (1988).			
6			ZHU, et al., "Preparation characterization and properties of polyfactids (PLA)- Poly(ethylene Glycol) (PEG) copolymers: A potential drug carrier," J. Applied Sci. 39:1-9 (1990).			

Examiner's Signature	West	Date Considered	
	47	7 4	

ATL1 #582287 v1

<sup>\*</sup>EXAMINER: britial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that Issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.

PTO/SB08A (1048 Approved by use Brough 1031/99, OMB 0551-0031 Patent and Tradement Office: U.S. DEPARTMENT OF COMMERCE

	Substitute fo	r form 1449	A/PTO TO	C mplete if Known	
	STATI	EMENT	N DISCLOSURE BY APPLICANT heets as necessary)	Applicati n Numb r	10/407,247
	•	•	••	Filing Date	June 25, 2003
				First Named Inventor	Jeffrey A. Hubbell
				Group Art Unit	
				Examiner Name	
Sheet	20	l of	20	Attorney Docket Number	UTSB 493 CIP CON (5)

OTHER ART - NON PATENT LITERATURE DOCUMENTS								
Examiner's Initials*	Cite No. <sup>1</sup>	inctude name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	14					
<b>%</b>	_	ZHU, et al., "Super microcapsules" (SMC), I. Preparation and Characterization of Star Polyethytene Oxide (PEO)-Polylactide (PLA) Copolymers," J. Polymer Sci.: Part A: Polymer Chemistry 27:2151-59 (1989).						
		•						
:								
	-							

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Signature

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant to place a check mark here if English language Translation is attached.